

REMARKS

Claims 1-4 are pending in this application.

By this Amendment, claims 1-4 have been amended. Claims 3 and 4 are amended in an effort to address that Patent Office's objection to these claims.

No new matter has been added. In particular, the language amended in claims 1-4 is based on language found, for example, on page 64, line 19 through page 66, line 25 of the specification to conform with the terminology found throughout the specification. The amendments to "changing" and "turning" are thus not intended to further limit the claims in any way (i.e., are not for patentability), but are instead intended merely to conform the claims and the specification.

I. Claim Objections

Claims 3 and 4 were objected to because the structure of the claims, presented as method claims, allegedly do not conform to U.S. practice. This objection is respectfully traversed.

By this Amendment, claims 3 and 4 are amended to more clearly identify the method steps. Recitation of the apparatus used in the method is not improper. The claims are in proper U.S. method format.

For the foregoing reasons, Applicants submit that the requirements of the Patent Office have been met. Reconsideration and withdrawal of the objection are thus respectfully requested.

II. Rejection under 35 U.S.C. §102(b)

Claims 1 and 3-4 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent No. 5,053,971 ("Wood"). This rejection is respectfully traversed.

The Patent Office alleges that Wood discloses all the limitations of recited claims 1 and 3-4. Applicants respectfully disagree with this assertion.

The invention as recited in claim 1 is not taught by Wood. Wood discloses an apparatus that includes lens surface mapping. The purpose of the data produced by this lens surface mapping is to verify that there will be sufficient thickness at the peripheral edge of the lens to permit beveling and to insure that chipping or fracturing of the lens edge will not occur. See column 4, lines 48-51 of Wood. Further, the lens edging apparatus disclosed in Wood is set up to base the speed and feed rates on the material selected. See column 10, lines 25-28 of Wood.

This disclosure is vastly different from the invention recited in claim 1. In particular, claim 1 recites that the control information processing apparatus has a machining condition setting function of setting machining conditions according to a lens thickness and a lens material. Wood only discloses that the lens thickness is measured to insure that the lens is thick enough to permit beveling and to prevent chipping and fracturing of the lens edge.

In the apparatus taught by Wood, the turning speed of the revolving machining tool, which corresponds to the multi-inserting cutter (195) of Wood, is not set according to the material of the spectacle lens to be machined. Further, in Wood the machining conditions including a turning speed of the revolving machining tool and a turning speed of the lens holding shaft are not set in accordance with the thickness of the spectacle to be machined.

In comparison, the apparatus of claim 1 is structured so that the turning speed of a revolving machining tool can be changed depending on lens thickness. This is beneficial because productivity can be enhanced to a greater extent without applying excessive loads and the like on a lens by increasing the turning speed for a small lens thickness while decreasing the turning speed for a large lens thickness. In Wood, none of the functions are set according to lens thickness.

Further, the method recited in claim 3 is not taught by Wood. Wood teaches of machining conditions when the spectacle lens is subjected to rough finishing. Machining

conditions when the spectacle is subjected to grooving as recited in claim 3 are not taught or disclosed by Wood.

Wood teaches an invention where the thickness of the part subjected to edge grinding according to the contour of the spectacle lens frame is measured. The purpose of this is to check whether or not there is enough width to allow V-grooving and grooving to be applied to an end surface, i.e., the edge, of the lens already subjected to edge grinding. This differs from recited claim 3 as the invention as recited in claim 3 is performed aiming at grooving.

Further, the method recited in claim 4 is not taught by Wood. Wood teaches of machining conditions when the spectacle lens is subjected to rough finishing. Machining conditions when the spectacle is subjected to chamfering as recited in claim 4 are not taught or disclosed by Wood.

As previously discussed, Wood teaches machining conditions when the spectacle lens is subjected to rough finishing. Wood does not teach changing either the turning speed of a revolving machining tool that performs chamfering or the turning speed of the lens holding shaft when chamfering the intersected edges formed by the surface of the circumferential edge of the spectacle lens to be machined and the optical surface of the lens as recited in claim 4.

Thus, Wood does not disclose a lens machining apparatus as recited in claim 1 or a lens machining method as recited in claims 3-4. Therefore, reconsideration and withdrawal of the rejection are respectfully requested.

III. Rejection under 35 U.S.C. §103(a)

Claim 2 was rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Wood in view of U.S. Patent No. 6,074,280 ("Mizuno"). This rejection is respectfully traversed.

As acknowledged by the Patent Office, Wood does not teach or suggest setting different machining conditions for rough machining and finishing machining. The Patent Office alleges that Mizuno teaches setting the speed in reference to the material used or the input processing condition, and setting a different speed for rough or fine finishing. Applicants respectfully disagree with this allegation.

In Mizuno, the turning speed of the lens holding shaft, which corresponds to chucking shafts 121 and 152 of Mizuno, is not set according to the material of the spectacle lens to be machined as in recited claim 2.

In rough machining, by decreasing the turning speed of the revolving machining tool relative to the turning speed of the lens holding shaft, the turning speed of the lens holding shaft is relatively increased. In the finishing machining, by increasing the turning speed of the revolving machining tool relative to the turning speed of the lens holding shaft, the turning speed of the lens holding shaft is relatively decreased. Therefore, the productivity can be enhanced to a greater extent than expected without applying excessive loads and the like on the lens.

Wood lacks the features recited in claims 2. Mizuno does not change the rotating speed of the grinding wheel for the rough machining and for the finishing machining, provided that the lens material is the same, as recited in claim 2. Therefore, even if Wood and Mizuno were combined, the invention as recited in claim 2 would not have been attained.

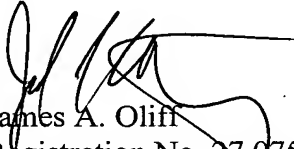
Therefore, reconsideration and withdrawal of the rejection are respectfully requested.

IV. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-4 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,


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